VALERO
THREE RIVERS REFINERY

February 24, 2015

Office of Enforcement and Compliance Assurance
Office of Federal Activities
International Compliance Assurance Division (2254 A)
Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460

7013 0600 0000 4629 1049

Re: 2014 Export Annual Report
Diamond Shamrock Refining Co., L.P.- Valero Three Rivers Refinery
Industrial Solid Waste Registration No. 31553
Hazardous Waste Permit No. 50100
EPA ID No. TXD990709966
Regulated No. RN 100542802
Customer No. CN 600124861

Dear Administrator,

Diamond Shamrock Refining Co., L.P. is submitting this Annual Report for the 2014 calendar year for hazardous waste that was exported to foreign countries for metals reclamation from our Three Rivers Refinery.

This report has been prepared in accordance with the requirements of 40 CFR 262.56.

(a)(1) The EPA identification number, name, and mailing and site address of the exporter: TXD990709966, Diamond Shamrock Refining Co., L.P., Valero Three Rivers Refinery, PO Box 490, 301 Leroy St., Three Rivers, TX 78071

(a)(2) The calendar year covered by the report: 2014

(a)(3) The name and site address of each consignee:
EG Metal Corporation, 836 Hwangsung-Dong, Namgu, Ulsan, Korea 680-160

(a)(4) By consignee, for each hazardous waste exported, a description of the hazardous waste, the EPA hazardous waste number (from 40 CFR part 261, subpart C or D), DOT hazard class, the name and US EPA ID number (where applicable) for each transporter used, the total amount of waste shipped and number of shipments pursuant to each notification:

EG Metal Corporation, Korea, DOT Hydrotreating Catalyst, K171, DOT Hazard Class 4.2, transporter Triad Transport (EPA ID# OKD981588791), 265.35 tons, 17 shipments

(a)(5) Except for hazardous waste produced by exporters of greater than 100 kg but less than 1000 kg in a calendar month, unless provided pursuant to §262.41, in even numbered years:
(i) A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated; and
The Source Reduction/Waste Minimization (SR/WM) Options and Implementation as found in our SR/WM Plan includes a description of the efforts undertaken to reduce the volume and toxicity of waste generated and can be found in Attachment I.

(ii) A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for years prior to 1984:
A comparison of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years as related to the options listed above can be found in Attachment II. As required by the SR/WM plan and associated reporting requirements, the annual progress report on source reduction and waste minimization activities will be submitted by July 1, 2015 to the Texas Commission on Environmental Quality, and will be available upon request.

(a)(6) A certification signed by the primary exporter: see Attachment III.

If you should have any questions or require additional information, please contact me via e-mail at kathy.garcia@valero.com, or by phone at (361) 786-8330.

Sincerely,

Kathy Garcia

Kathy Garcia
Staff Environmental Engineer

Attachments

cc: TCEQ Region 14

7013 0600 0000 4629 1056

ATTACHMENT I

SOURCE REDUCTION/WASTE MINIMIZATION PLAN OPTIONS AND IMPLEMENTATION

VALERO THREE RIVERS REFINERY

Source Reduction/Waste Minimization Options

Option 1- Good Operating Practices

Briefly describe the option:
Evaluate metals reclamation facilities to recycle spent hydrotreating catalysts. The #2 HDU Catalyst was sent to Gulf Chemical for reclamation in 2010. #1 HDU and DHT catalysts were sent to Hong Jing for reclamation in 2011. The POT Catalyst was sent to Tricat for reclamation in 2012. The DOT Catalyst R-2248 was sent to Eurecat (Tricat) in 2013 for regeneration. The DOT Catalyst R-2243 was sent to EG Metal Corp. in 2014 for metals recovery. The HCU Catalyst is planned to be reclaimed in 2015. Evaluate other hydrotreating catalysts as they are changed out in the future.

Waste stream affected: Spent Hydrotreating Catalyst

Input material affected: Catalyst

Products affected: none

Estimated waste reduction: #2 HDU (44.81 tons) (Total of 44.81 tons HW for 2010). #1 HDU (26.99 tons) and DHT (114.18 tons) (Total of 141.17 tons HW for 2011). POT (27.885 tons) (Total of 27.885 tons HW for 2012). DOT R-2248 (Total of 285.30 tons HW for 2013) DOT R-2243 (Total of 265.35 tons HW for 2014). HCU (193.9515 tons) (Total of 193.9515 tons HW for 2015)

Type reduction: Recycle/reuse

Option 2- Process and Equipment Modification

Briefly describe the option:
Evaluate catalyst to attempt to delay change out. The waste summary annualized catalyst over the expected life of the catalyst (example 3 yr. life of 27,000 lbs of catalyst is 9000 lbs/yr). If the life of the catalyst is extended, this will reduce the total amount generated over the life of this plan. This is a process of data evaluation on equipment utilization, the quality of feed stocks, and is constantly reviewed by market analysis and technology changes as well as government regulations. This evaluation is a by-product of maximizing the refinery efficiency and results in no additional expenditure, but will have a positive affect on cost over time by reducing total waste generated.

2012: HCU R-2 catalyst life was extended due to the majority of Three Rivers crude feed now consisting of domestic Eagle Ford. Since the HCU reactor feed now requires less catalyst activity to crack material in the 2nd hydrocracking reactor, the catalyst life will be extended an estimated 4 years.
2013: The HCU R-2 was decided to be changed out in the next turnaround to obtain more diesel draw.

Waste stream affected: Catalyst in both east and west plants.

Input material affected: Catalyst

Products affected: potential quantity or quality

Estimated waste reduction: This amounts to a reduction of point source chemicals of Ni and MoO3 of 2.83 tons/yr, and a VOC reduction of 0.0003 tons/year. No reduction was taken.

Type reduction: Source reduction

4

Option 3- Spill and Leak Prevention

Briefly describe the option:
Spill prevention can be improved through the proper training, maintenance and operation of personnel and equipment. Review goals for spills, communication and monitoring as well as continual feed back to all refinery personnel. Perform tank and equipment inspection including structural integrity, pipe and valve integrity, and instrumentation operation and calibration as required. Tanks are being evaluated more aggressively for increased controls (i.e. lined tank floors) to address known corrosion based on tank service and performance. Goals and training are currently in place and this can be addressed with no cost. Tank and equipment issues are being addressed through compliance with recent government imposed safety inspections and an internally enhanced Root Cause Analysis incident review and mitigation procedure. The affect on cost is to reduce the transportation and disposal expenses.

Waste stream affected: Spill cleanup and TRI.

Input material affected: None

Products affected: None

Estimated waste reduction: This reduction is based on one large spill event over a 5-year period (based on the TK-43 spill of about 292 tons in 2010). Estimated reduction is 5.8 tons per year (10% reduction of an average 58 tons per year). TRI should see a proportionate reduction.

Type reduction: Source reduction

Option 4- Spill and Leak Prevention

Briefly describe the option:
Fourteen pumps were retrofitted in 2010 for a reduction of 1.366 tons/year. Five pumps and four various compressor seal vents were retrofitted and complete in 2011 for an additional reduction of 4.097 tons/year. Two pumps and five various compressor seal vents were retrofitted and complete in 2012 for an additional reduction of 4.926 tons/year. Five pumps and two compressor seal vents were retrofitted and complete in 2013 for an additional reduction of 2.259 tons/year. Six pumps were retrofitted and complete in 2014 for an additional reduction of 0.451 tons/year. Thirteen pumps are proposed to be retrofitted for 2015 for an additional reduction of 0.797 tons/year. Continue to evaluate additional seals for upgrade opportunities.

Waste stream affected: Fugitive emissions

Input material affected: none

Products affected: none

Estimated waste reduction: 1.366 tons/year (2010), 4.097 tons/yr (2011), 4.926 tons/yr (2012), 2.259 tons/yr (2013), 0.451 tons/yr (2014), and 0.797 tons/yr (2015) of cumulative VOC fugitive emissions.

Type reduction: Source Reduction

Option 5- Good Operating Practices

Briefly describe the option:

TK-31 slurry tank was taken out of service in 2011 for its 10-yr inspection. There was an estimated 2150 bbls of tank bottoms based on 12.5 feet of solids (8 lbs/gal). A centrifuge was brought onsite for hazardous waste processing and reduction. The cutter stock along with the heavy paraffins were recovered at elevated temperatures. About 250 tons of centrifuge cake were sent to a thermal desorption unit at US Ecology.

Waste stream affected: Dewatered sludge

Input material affected: none

Products affected: none

Estimated waste reduction: Reduced slurry tank bottoms by about 30% for a reduction of 111.31 tons of hazardous waste in 2011.

Type reduction: Source Reduction

Option 6- Process and Equipment Modification

Briefly describe the option:

Irrigation charge water is being recycled for oil field use. The total amount of water recycled for 2011 was 257,545 bbls for a reduction of 0.874 tons of VOC emissions. 959,536 bbls were recycled in 2012 for an additional reduction of 3.26 tons of VOC emissions. 992,611 bbls were recycled in 2013 for an additional reduction of 3.37 tons of VOC emissions. 629,135 bbls were recycled in 2014 for an additional reduction of 2.13 tons of VOC emissions. Irrigation charge water is continuing to be supplied for oil field use as needed.

Waste stream affected: Irrigation Water

Input material affected: none

Products affected: none

Estimated waste reduction: 257,545 bbls of recycled irrigation water for 0.874 tons of VOC emissions reported for 2011, 959,536.2 bbls of recycled irrigation water for 3.26 tons of VOC emissions reported for 2012, 992,611 bbls of recycled irrigation water for 3.37 tons of VOC emissions reported for 2013, and 629,135 bbls of recycled irrigation water for 2.13 tons of VOC emissions reported for 2014.

Type reduction: Recycle/reuse

Option 7- Spill and Leak Prevention

Briefly describe the option:

Recover flare gas from all flares to decrease emissions, expected to be complete the end of 2011. Total VOC emissions are expected to be reduced by 67.2 TPY.

Waste stream affected: Flare source emissions

Input material affected: none

Products affected: none

Estimated waste reduction: Total reduction is 67.2 TPY of VOC emissions starting in 2012.

Type reduction: Source Reduction

Option 8- Process and Equipment Modification

Briefly describe the option:

The Energy Stewardship Program has resulted in various energy savings throughout the refinery. The reduced fuel gas usage has resulted in an emission savings for the chemicals of lead and mercury. The energy savings projects have reduced a total of 0.00045 tons of point source emissions for 2010, 0.0001 tons in 2011, and an additional 0.0001 tons in 2012. Continue to evaluate projects for energy savings throughout the refinery.

Waste stream affected: Point source emissions

Input material affected: none

Products affected: none

Estimated waste reduction: 0.00045 tons/yr of point source emissions for lead and mercury (2010), 0.0001 tons/yr for 2011, and 0.0001 tons/yr for 2012.

Type reduction: Source Reduction

Option 9- Good Operating Practices

Briefly describe the option:
All irrigation water is being looked at for a wastewater reuse project. This wastewater is being evaluated to be put into a RO system, where 50% of the outlet would be used as boiler feed water in place of Kitty Water, and 50% would be put through the UIC well. This project is being evaluated due to the City of Three Rivers possibly reducing our non-potable water supply. The total tons of wastewater recycled is estimated at 300 gpm (9% evaporation rate to air and the remainder as applied to water if discharging to river) for a total of 656,737 tons/year.

Waste stream affected: Wastewater

Input material affected: water purchased from outside sources

Products affected: none

Estimated waste reduction: 656,737 tons of wastewater for 12.737 tons of VOC emissions reported waste/year.

Type reduction: Recycle/reuse

Option 10

Briefly describe the option:
EPLT boiler blowdowns and stripper sour water are being routed to wastewater. A portion of these streams are now being routed to the new flare gas recovery compressors (10 gpm) and as seal drum makeup water (12 gpm). The total tons of wastewater being recycled is estimated at 22 gpm (9% evaporation rate to air and the remainder as applied to water) for a total of 48,161 tons per year.

Waste stream affected: Wastewater

Input material affected: water purchased from outside sources

Products affected: none

Estimated waste reduction: 48,161 tons of wastewater for 0.934 tons of VOC emissions reported waste/year.

Type reduction: Recycle/reuse

Option 11- Good Operating Practices

Briefly describe the option:

The wastewater and slop oil tanks were evaluated to be centrifuged to reduce the amount of solids in the tank. The Valero coker facility (Port Arthur) accepted TK-6 and TK-8 material centrifuged in 2011/2012 as secondary oil-bearing materials for a total hazardous waste reduction of 544.52 tons. Boxes were shipped debris free and without liners. The slop oil TK-310 was also centrifuged, but only yielded about 70.26 tons of secondary oil bearing material that was sent to the same coker facility listed above. TK-338 and TK-7 materials were centrifuged in 2013 to ready the tanks for API internal inspection. Although a coker was not available to utilize this year, the materials were still centrifuged and achieved a reduction of about 40%, or 293.4 tons total of hazardous waste. Wastewater TK-6 was taken out of service in 2014. Although a coker was not available to utilize this year, the materials were still centrifuged and achieved a reduction of about 40%, or 229.29 tons total of hazardous waste. The Valero Port Arthur coker is being evaluated for capacity. The Valero Corpus Christi coker is also being evaluated for possible receipt of materials in the future.

Waste stream affected: Dewatered sludge

Input material affected: none

Products affected: none

Estimated waste reduction: Reclaimed WWT and Slop Oil centrifuge solids for a total reduction of 614.78 tons of hazardous waste in 2012. Centrifuged TK-338 and TK-7 for a reduction of 293.4 tons of hazardous waste in 2013. Centrifuged TK-6 for a reduction of 229.29 tons of hazardous waste in 2014.

Type reduction: Recycle/reuse

ATTACHMENT II

SUMMARY OF IMPLEMENTATION MILESTONES ACTUALLY ACHIEVED

VALERO THREE RIVERS REFINERY

SUMMARY OF IMPLEMENTATION MILESTONES

Assume 5% of VOCs are reported as TRI chemicals

BASE YEAR : 2009 GOAL YEAR: 2014

OPTIONS

2010 Goals	tons VOCs	tons HW	Pt Source Chemicals	
1		44.81		Good Operating Practices
4	1.366			Spill & Leak Prevention
8			0.00045 Pb & Hg	Process Modifications
	TOTAL TRI REDUCED =		*0.06875 tons*	
	TOTAL HW REDUCED =		*44.81 tons*	

2011 Goals	tons VOCs	tons HW	Pt Source Chemicals	
1		141.17		Good Operating Practices
4	5.463			Spill & Leak Prevention
5		111.31		Good Operating Practices
6	0.874			Raw Material Modifications
8			0.00055 Pb & Hg	Process Modifications
	TOTAL TRI REDUCED =		*0.3174 tons*	
	TOTAL HW REDUCED =		*252.48 tons*	

2012 Goals	tons VOCs	tons HW	Pt Source Chemicals	
1		27.885		Good Operating Practices
4	10.389			Spill & Leak Prevention
6	3.26			Raw Material Modifications
7	67.2			Spill & Leak Prevention
8			0.00065 Pb & Hg	Process Modifications
10	0.934			Raw Material Modifications
11		614.78		Good Operating Practices
	TOTAL TRI REDUCED =		*4.0898 tons*	
	TOTAL HW REDUCED =		*642.665 tons*	

2013 Goals	tons VOCs	tons HW	Pt Source Chemicals	
1		285.3		Good Operating Practices
4	12.648			Spill & Leak Prevention
6	3.37			Raw Material Modifications
7	67.2			Spill & Leak Prevention
8			0.00065 Pb & Hg	Process Modifications
10	0.934			Raw Material Modifications
11		293.4		Good Operating Practices
	TOTAL TRI REDUCED =		*4.20825 tons*	
	TOTAL HW REDUCED =		*578.7 tons*	

2014 Goals	tons VOCs	tons HW	Pt Source Chemicals	
1		265.35		Good Operating Practices
4	13.099			Spill & Leak Prevention
6	2.13			Raw Material Modifications
7	67.2			Spill & Leak Prevention
8			0.00065 Pb & Hg	Process Modifications
10	0.934			Raw Material Modifications
11		229.29		Good Operating Practices
	TOTAL TRI REDUCED =		*4.1688 tons*	
	TOTAL HW REDUCED =		*265.35 tons*	

11

2014 REDUCTION ACHIEVEMENT	HW (tons)	TRI (tons)	PART 3
Good Operating Practices	494.6	0.00000	
Inventory Control	0.0	0.00000	
Spill & Leak Prevention	0.0	4.01495	
Raw Material Modifications	0.0	0.15320	
Process Modifications	0.0	0.00065	
Cleaning and Degreasing	0.0	0.00000	
Surface Preparation and Finishing	0.0	0.00000	
Product Modification	0.0	0.00000	

PROJECTED AMTS FOR GOAL YEAR	HW (tons)	TRI (tons)	PART 2
	1266.891	66.091	
	1784.005	12.853	
	17.318	5.933	

BASE YEAR (2009) in tons:	1532.241	70.26

ATTACHMENT III

PRIMARY EXPORTER CERTIFICATION

Certification by Primary Exporter

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Claire P Garza

Claire Garza, HS&E Director

2/24/2015

Date

Valero Three Rivers Ref
PO Box 490
Three Rivers, Texas 78071

7013 0600 0000 4629 1049

Route **EPA Mail**

To: Federal Activites

Mailstop: ARIEL RIOS SOUTH
Department: 2254A
Phone:
City/State Certified

7013060000046291049

MAR - 3 2014

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(2254A)
E.P.A.
1200 Pennsylvania Ave. NW
Washington, DC 20460

Ariel Rios